### Case 3140

# Sceloporus occidentalis Baird & Girard, 1852 (Reptilia, Sauria): proposed replacement of rediscovered syntypes by a neotype

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Abstract. The purpose of this application is to designate a neotype for the Pacific blue-bellied lizard *Sceloporus occidentalis* Baird & Girard, 1852 (family PHRYNO-SOMATIDAE) from the west coast ranges of North America. Two missing original syntypes were rediscovered in 1996 and, under Article 75.8 of the Code, resume the status of name-bearing specimens; however, they are immature specimens which do not distinguish *S. occidentalis* from closely related taxa. The proposed neotype, originally designated in 1954, is a well preserved adult specimen of known provenance.

**Keywords.** Nomenclature; taxonomy; Reptilia; Sauria; PHRYNOSOMATIDAE; *Sceloporus occidentalis*; Pacific blue-bellied lizards; western North America.

- 1. In 1852 Baird & Girard (p. 175) described *Sceloporus occidentalis* from 'California, and probably Oregon' on the basis of unspecified material in the U.S. National Museum, Washington.
- 2. A few years later the species was thoroughly described and illustrated (Girard, 1858, pp. 383–384, pl. 19, figs. 8–14), largely from an adult male (which is very likely specimen no. USNM 2838; see para. 3 below), but without any indication of the source of the material or mention of a locality, except as given in the original description.
- 3. A year later Baird (1859, p. 9) listed specimens USNM 2838 from 'Benicia, California' and USNM 2866 from the 'Upper Willamette valley' as examples of the species. They were both collected by Dr J.S. Newberry, who in 1857 published a report on the zoology of the proposed rail route from the Sacramento Valley to the Columbia River, and were probably original specimens of *Sceloporus occidentalis* Baird & Girard, 1852 (see, for example, Bell & Price, 1996, p. 1).

- 4. Grinnel & Camp (1917, p. 159) restricted the type locality of *S. occidentalis* to Benicia, Solano County, California.
- 5. In 1954 Bell (p. 34), the senior author of this application, designated a neotype for *S. occidentalis*, specimen no. MVZ 59874 in the Museum of Vertebrate Zoology, University of California, from Benicia, California, because there was a need to distinguish *S. occidentalis occidentalis* from closely related taxa and both specimens USNM 2838 and 2866 were supposedly lost. Dr Doris Cochran, then Curator of Herpetology at the U.S. National Museum, stated (in litt. to Bell, 1954) that 2838 was a USNM number but the specimen had not been in the National Museum since she went there in 1919. It did not appear to be in the Academy of Natural Sciences of Philadelphia either. It had apparently been lost. Indeed, Cochran (1961) did not list any types of *S. occidentalis* in the U.S. National Museum.
- 6. Price (in Bell & Price, 1996, p. 4) reported that 'According to R.P. Reynolds [of the U.S. National Museum] (in litt., 2.v.1996), USNM 2838 (presumably Girard's male) is lost, but USNM 2866 still exists and consists of two specimens, both *S. occidentalis*, a subadult female in good condition and a poorly preserved hatchling'. Thus, there are two original specimens of *S. occidentalis* still in existence. They are, however, both immature and fail to exhibit some diagnostic features critical for identification. Price (in Bell & Price, 1996) noted that 'With the discovery of these two syntypes, Article 75(h) of the International Code of Zoological Nomenclature [3rd edition, 1985] requires the International Commission on Zoological Nomenclature to rule on the status of the name-bearing type of *Sceloporus occidentalis*, a process which we have initiated'. An application has not been submitted until now.
- 7. Article 75.8 of the 4th edition of the Code, which came into effect in January 2000, records that 'If, after the designation of a neotype, the name-bearing type (holotype, syntypes, lectotype or previous neotype) of the nominal species-group taxon that was (were) presumed lost is (are) found still to exist, on publication of that discovery the rediscovered material again becomes the name-bearing type and the neotype is set aside (unless, following an application, the Commission rules that the neotype is to be retained as the name-bearing type)'.
- 8. The name Sceloporus occidentalis is very well known and well used for the Pacific blue-bellied lizard and has appeared in many recent publications on taxonomy, phylogeny, anatomy, biogeography, ecology, genetics, food habits, predators, physiology and reproduction, social behaviour and parasitism (an extensive and detailed bibliography was included in Bell & Price, 1996, pp. 2-4). We propose that the rediscovered syntypes of S. occidentalis be set aside and that a neotype be designated as the name-bearing specimen. Both the rediscovered syntypes are immature, fail to show some critical features and are from an imprecise locality in Oregon. The neotype specimen MVZ 59874 designated by Bell (1954) is an adult in excellent condition, exhibiting all critical features, and is from Benicia, California which has long been accepted as the type locality of Sceloporus occidentalis. The specimen, which is female, was collected by Dr Robert Stebbins; the total body length (snout-vent) is 69 mm, and the tail length (which is entire) is 81 mm. The color and scutellation, which were described by Bell & Price (1996), are typical of the nominate subspecies S.o. occidentalis. This subspecies occurs in California, including coastal ranges north of San Francisco and the Sierra Nevada to 7000 feet, and Oregon to the Columbia River. It is also found in the Puget Sound area of Washington State.

- 9. The International Commission on Zoological Nomenclature is accordingly asked:
  - (1) to use its plenary power to set aside all previous type fixations for the nominal species *Sceloporus occidentalis* Baird & Girard, 1852 and to designate specimen MVZ 59874 in the Museum of Vertebrate Zoology, University of California, as the neotype;
  - (2) to place the name *occidentalis* Baird & Girard, 1852, as published in the binomen *Sceloporus occidentalis* and as defined by the neotype designated in (1) above, on the Official List of Specific Names in Zoology.

#### References

Baird, S.F. 1859. Report upon reptiles collected on the survey. Pp. 9–13 in Report of Lieut. Henry L. Abbot, Corps of Topographical Engineers, upon explorations for a railroad route, from the Sacramento Valley to the Columbia River, made by Lieut. R.S. Williamson. Reports of explorations and surveys, to ascertain the most practicable and economical route for a railroad from the Mississippi River to the Pacific Ocean, vol. 10, part 4, no. 4. 33rd Congress, 2nd Session, House of Representatives, Ex Document No. 91. Washington, D.C.

Baird, S.F. & Girard, C. 1852. Descriptions of new species of reptiles, collected by the U.S. Exploring Expedition under the command of Capt. Charles Wilkes, U.S.N. Part 1, including the species from the western coast of America. Proceedings of the Academy of

Natural Sciences of Philadelphia, 6: 174–177.

Bell, E.L. 1954. A preliminary report on the subspecies of the Western Fence lizard, *Sceloporus occidentalis* and its relationships to the Eastern Fence lizard, *Sceloporus undulatus*. *Herpetologica*, **10**: 31–36.

Bell, E.L. & Price, A.H. 1996. Sceloporus occidentalis Baird & Girard. Catalogue of American Amphibians and Reptiles, 631: 1–17.

Cochran, D.M. 1961. Type specimens of reptiles and amphibians in the U.S. National Museum. *Bulletin of the United States National Museum*, **220**: 1–291.

Girard, C.F. 1858. Herpetology. Pp. 711–720 in: United States Exploring Expedition, during the years 1838, 1839, 1840, 1841, 1842, under the command of Charles Wilkes, U.S.N., vol. 20.

Grinnell, J. & Camp, C.L. 1917. A distributional list of the amphibians and reptiles of California. *University of California Publications in Zoology*, 17: 127–208.

Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., *clo* The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).